Special Issue

Mathematics-Driven Computer Vision and Multi-Modal Learning

Message from the Guest Editor

We seek high-quality articles that explore how mathematical frameworks, such as optimization theory, statistical learning, geometric modeling, signal processing, and differential geometry, drive innovations in these specialized domains. Submissions may cover theoretical advancements, including novel mathematical models for multi-modal data fusion. scene feature representation, or robust inference under complex environmental conditions, as well as practical applications such as enhancing the accuracy of remote sensing image interpretation, low-altitude target detection, or dynamic scene understanding. We encourage studies that bridge mathematical rigor with real-world challenges in remote sensing and lowaltitude scenarios, such as comparing classical and emerging mathematical tools for handling data sparsity, noise, or multi-source heterogeneity or demonstrating how mathematical insights solve critical problems such as multi-modal alignment, small target recognition, or 3D scene reconstruction. Manuscripts that are purely speculative without empirical validation, theoretical proof, or practical application verification will not be considered.

Guest Editor

Dr. Junjie Zhang

School of Advanced Technology, Xi'an Jiaotong-Liverpool University, Suzhou 215123, China

Deadline for manuscript submissions

31 July 2026



Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/253986

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

mdpi.com/journal/mathematics





Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

